

ARGEO PAUL CELLUCCI Governor

JANE SWIFT Lieutenant Governor

COMMONWEALTH OF MASSACHUSETTS EXECUTIVE OFFICE OF ENVIRONMENTAL AFFAIRS DEPARTMENT OF ENVIRONMENTAL PROTECTION

ONE WINTER STREET, BOSTON, MA 02108 617-292-5500

BOB DURAND Secretary

LAUREN A. LISS Commissioner

MODIFIED PILOTING APPROVAL

Pursuant to Title 5, 310 CMR 15.000

Name and Address of Applicant:

Allan N. Young, President Cromaglass Corporation 2902 North Reach Road P.O. Box 3215 Williamsport, PA 17701

Trade name of technology and model: Cromaglass Wastewater Treatment Systems: CA-5D, CA 12D, CA-15D, CA-25D, CA-30D, CA-50D, CA-60D, CA-100D, CA-150D* (hereinafter the "System").

Transmittal Number: 206479

Date of Issuance: October 17, 2000
Date of Modification: November 21, 2000
Date of Expiration: October 17, 2005

Authority for Issuance

Pursuant to Title 5 of the State Environmental Code, 310 CMR 15.000, the Department of Environmental Protection hereby issues this Approval to: Cromaglass Corporation, 2902 North Reach Road, P.O. Box 3215, Williamsport, PA 17701 (hereinafter "the Company"), to Pilot in the Commonwealth of Massachusetts the System described herein. Sale and use of the System are conditioned on and subject to compliance by the Company and the System owner with the terms and conditions set forth below. Any noncompliance with the terms or conditions of this Approval constitutes a violation of 310 CMR 15.000.

Glenn Haas, Acting Assistant Commissioner

Bureau of Resource Protection

Date

*Modified to include model CA-150D

Department of Environmental Protection

I. Purpose

- 1. The purpose of this Approval is to provide field testing and technical demonstration of the System in Massachusetts, on a Pilot Approval basis, so as to evaluate that the System can function effectively.
- 2. With the necessary permits and approvals required by 310 CMR 15.000, this Pilot Approval authorizes the use and installation of the System in Massachusetts, and requires testing so that the Department can determine whether the System consistently can or cannot function to effectively reduce total nitrogen (TN) to less than 10 mg/L.
- 3. The System may only be installed on facilities that meet the criteria of 310 CMR 15.285(2).

II. Design Standards

- 1. The System shall be installed in series between the building sewer and the soil absorption system (SAS) of a standard Title 5 system constructed in accordance with 310 CMR 15.100 15.279, subject to the provisions of this Approval. The use of a septic tank is not required.
- 2. The Cromaglass System is a Sequencing Batch Reactor (SBR). The unit is a fiberglass tank separated into three chambers. The raw sewage from a building sewer enters into the first chamber. The large particles are retained while the liquid and small particles flow through the retention screens to the second chamber. The second chamber acts as a primary aeration and denitrification section. Agitation and mixing are provided by an aeration process, at intervals the aeration stops and anoxic conditions are created in the tank. At preset intervals a batch of partially treated wastewater is transferred to the third chamber which acts as a settling chamber. After settling, a portion of the treated effluent is discharged to the SAS.

III. General Conditions

- 1. No more than 15 Systems may be installed under this Approval.
- 2. All provisions of 310 CMR 15.000 are applicable to the use of this System, the System owner and the Company, except those that specifically have been varied by the terms of this Approval.
- 3. Any required operation and maintenance, monitoring and testing shall be performed in accordance with a Department approved plan. Any required sample analysis shall be conducted by an independent U.S. EPA or DEP approved testing laboratory, or a DEP approved independent university laboratory, unless otherwise is provided in the Department's written Approval. It shall be a violation of this Approval to falsify any data collected pursuant to an approved testing plan, to omit any required data or to fail to submit any report required by such plan.
- 4. The facility served by the System and the System itself shall be open to inspection and sampling by the Department and the local approving authority at all reasonable times.
- 5. In accordance with applicable law, the Department and/or the local approving authority may require the owner of the System to cease operation of the system and/or to take any other action as it deems necessary to protect public health, safety, welfare and the environment.

- 6. The Department has not determined that the performance of the System will provide a level of protection to public health and safety and the environment that is at least equivalent to that of a sewer system. Accordingly, no System shall be upgraded or expanded, if it is feasible to connect the facility to a sanitary sewer, unless as allowed by 310 CMR 15.004.
- 7. Design and installation of the System shall be in strict conformance with the Company's DEP approved plans and specifications, 310 CMR 15.000 and this Approval.

IV. Conditions Applicable to the System Owner

- 1. The System is approved in connection with the discharge of sanitary wastewater only. Any non-sanitary wastewater generated or used at the facility served by the System shall not be introduced into the System and shall be lawfully disposed of.
- 2. Effluent discharge concentrations from the System shall meet or exceed secondary treatment standards of 30 mg/L biochemical oxygen demand (BOD₅) and 30 mg/L total suspended solids (TSS). The effluent pH shall not vary more than 0.5 standard units from the influent water supply.
- 3. For both residential and non-residential uses, the TN concentration in the effluent discharged from the System shall not exceed 10 mg/L.
- 4. Operation and Maintenance agreement:
 - i. Throughout its life, the System shall be under an operation and maintenance (O&M) agreement. The initial O&M agreement shall be for at least two years. Subsequent agreements shall be for at least one year.
 - ii. No System shall be used until an O&M agreement is submitted to the Department and the local approving authority which:
 - a. provides for the contracting of a person or firm competent in providing services consistent with the System's specifications and the operation and maintenance requirements specified by the designer and any specified by the Department;
 - b. contains procedures for notification to the Department and the local approving authority within five days of a System failure or alarm event and for corrective measures to be taken immediately;
 - c. provides the name of an operator, which must be a Massachusetts certified operator if one is required by 257 CMR 2.00, that will operate and monitor the System. The operator must operate and maintain the System at least every three months and anytime there is an alarm event;
 - d. includes an agreement with the Company to monitor the System as specified in Section V paragraph 5 of this Approval.
- 5. The owner of the System shall at all times have the System properly operated and maintained in accordance with the Company's and the designer's operation and maintenance requirements and this Approval.
- 6. The owner shall furnish the Department any information, which the Department may request regarding the System, within 21 days of the date of receipt of that request.

7. The owner of the System shall provide a copy of this Approval, prior to the signing of a purchase and sale agreement for the facility served by the System or any portion thereof, to the proposed new owner.

V. Conditions Applicable to the Company

- 1. By January 31 of each year, the Company shall submit to the Department a report, signed by a corporate officer, general partner or Company owner, that contains information on the System for the previous calendar year. The report shall state: the number of units of the System sold for use in Massachusetts during the previous calendar year; the address of each installed System, the owner's name and address, the type of use (e.g. residential, commercial, school, institutional) and the design flow; and for all Systems installed since the date of issuance of this Approval, all known failures, malfunctions, and corrective actions taken and the address of each such event.
- 2. The Company shall notify the Director of the Watershed Permitting Program at least 30 days in advance of the proposed transfer of ownership of the technology for which this Approval is issued. Said notification shall include the name and address of the proposed new owner and a written agreement between the existing and proposed new owner containing a specific date for transfer of ownership, responsibility, coverage and liability between them. All provisions of this Approval applicable to the Company shall be applicable to successors and assigns of the Company, unless the Department determines otherwise.
- 3. The Company shall furnish the Department any information that the Department requests regarding the System, within 21 days of the date of receipt of that request.
- 4. Prior to its sale of the System, the Company shall provide the purchaser with a copy of this Approval. In any contract for distribution or sale of the System, the Company shall require the distributor or seller to provide the purchaser of the System, prior to any sale of the System, with a copy of this Approval.
- 5. For systems serving a facility with a design flow less than or equal to 2,000 gallons per day (gpd), effluent from each installed System shall be monitored monthly for the first six months and quarterly thereafter. At a minimum the following parameters shall be monitored: pH, BOD₅, TSS, and TN. Each time the System is monitored, a water meter or equivalent method for recording water use shall be recorded. For systems serving a facility with a design flow greater than 2,000 gpd, both influent and effluent from each installed System shall be monitored monthly for the first twelve months and quarterly thereafter. At a minimum, the following parameters shall be monitored: pH, BOD₅, TSS, TN, ammonia, and alkalinity. Each time the System is monitored, a water meter or equivalent method for recording water use shall be recorded. All monitoring data shall be submitted to the Department within 30 days of the sampling date. After 18 months of monitoring and at the written request of the Company, the Department may reduce or eliminate the monitoring requirements.
- 6. Should the effluent TN concentration from a System exceed 10 mg/L on two consecutive sampling events, the Company shall within 60 days submit a report to the Department on the reasons for the exceedances with recommendations to preclude future violations.
- 7. If the Company wishes to continue this Piloting Approval after its expiration date, the Company shall apply for and obtain a renewal of this Approval. The Company shall submit a renewal application at least 180 days before the expiration date of this Approval, unless permission for a later date has been granted in writing by the Department.

VI. Reporting

1. All notices and documents required to be submitted to the Department by this Approval shall be submitted to:

Director Watershed Permitting Program Department of Environmental Protection One Winter Street - 6th floor Boston, Massachusetts 02108

VII. Rights of the Department

1. The Department may suspend, modify or revoke this Approval for cause, including, but not limited to, non-compliance with the terms of this Approval, non-payment of the annual compliance assurance fee, for obtaining the Approval by misrepresentation or failure to disclose fully all relevant facts or any change in or discovery of conditions that would constitute grounds for discontinuance of the Approval, or as necessary for the protection of public health, safety, welfare or the environment, and as authorized by applicable law. The Department reserves its rights to take any enforcement action authorized by law with respect to this Approval and/or the System against the owner, or operator of the System and/or the Company.

VIII. Expiration date

1. Notwithstanding the expiration date of this Approval, any System sold and installed prior to the expiration date of this Approval, and approved, installed and maintained in compliance with this Approval (as it may be modified) and 310 CMR 15.000, may remain in use unless the Department, the local approving authority, or a court requires the System to be modified or removed, or requires discharges to the System to cease.

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